CLAIMS

1. A storage apparatus comprising:

a shelf for displaying products;

a first out-of-shelf supply duct that, for controlling environmental conditions in a periphery of the products, supplies first conditioning air adjusted to a first condition; and

a second out-of-shelf supply duct that supplies second conditioning air adjusted to a second condition that differs to the first condition,

wherein the shelf comprises:

a first connection port that is connected to the first out-of-shelf supply duct;

a second connection port that is connected to the second out-of-shelf supply duct;

an opening adjusting means for adjusting an opening of the first connection port to the first out-of-shelf supply duct and an opening of the second connection port to the second out-of-shelf supply duct, respectively; and

a shelf supply duct for blowing out at least one of the first conditioning air supplied from the first connection port and the second conditioning air supplied from the second connection port from air outlets disposed at least one of above and below the shelf.

2. A storage apparatus according to Claim 1,

wherein in the shelf supply duct, the first conditioning air supplied from the first connection port and the second conditioning air supplied from the second connection port are mixed.

3. A storage apparatus according to Claim 2,

wherein the first connection port and the second connection port are disposed so as to not coincide in a left-right direction of the shelf, and

the shelf supply duct includes a mixing part that extends in the left-right direction of the shelf so as to connect the first connection port and the second connection port, and a supply part that extends from the mixing part in a front-rear direction of the shelf, the supply part being connected to the air outlets and a cross-sectional area of the supply part being smaller than that of the mixing part.

4. A storage apparatus according to Claim 3,

wherein the first connection port, the second connection port, and the mixing part are disposed on a base end side of the shelf, and

the base end side is a side where the shelf is attached to at least one of the first out-of-shelf supply duct, the second out-of-shelf supply duct, and a housing that forms a storage space in which the shelf is disposed.

5. A storage apparatus according to Claim 1,

further comprising an out-of-shelf discharge duct disposed in parallel with the first out-of-shelf supply duct and the second out-of-shelf supply duct,

wherein the shelf further comprises a shelf discharge duct that extends in a left-right direction and a third connection port that connects the shelf discharge duct to the out-of-shelf discharge duct.

6. A storage apparatus according to Claim 5,

wherein the first connection port, the second connection port, and the third connection port are disposed in a line in the left-right direction on a base end side of the shelf, and

the base end side is a side where the shelf is attached to at least one of the first out-of-shelf supply duct, the second out-of-shelf supply duct, and a housing that forms a storage space in which the shelf is disposed.

7. A storage apparatus according to Claim 6,

wherein the first connection port and the second connection port are disposed so as to not coincide in the left-right direction of the shelf and the third connection port is disposed between the first connection port and the second connection port.

8. A storage apparatus according to Claim 5,

wherein the shelf discharge duct is disposed on a base end side of the shelf, and

the base end side is a side where the shelf is attached to at least one of the first out-of-shelf supply duct, the second out-of-shelf supply duct, and a housing that forms a storage space in which the shelf is disposed.

9. A storage apparatus according to Claim 1,

wherein the shelf further comprises a means for detachably attaching to at least one of the first out-of-shelf supply duct, the second out-of-shelf supply duct, and a housing that forms a storage space in which the shelf is disposed.

10. A storage apparatus according to Claim 9,

wherein duct-side connection ports of the first out-of-shelf supply duct and the second out-of-shelf supply duct that are respectively connected to the first connection port and the second connection port include dampers that automatically close when the shelf is detached.

11. A storage apparatus according to Claim 10,

wherein openings of the dampers are adjustable by the opening adjusting means of the shelf.

12. A storage apparatus according to Claim 1,

wherein the shelf supply duct includes a first supply duct that outputs one of

the first conditioning air supplied from the first connection port and the second conditioning air supplied from the second connection port from an upper surface of the shelf and a second supply duct that supplies an other of the first conditioning air and the second conditioning air from a lower surface of the shelf.

13. A storage apparatus according to Claim 1,

wherein the shelf supply duct is enclosed inside the shelf.

14. A shelf for displaying products, comprising:

a first connection port that is connected to a first out-of-shelf supply duct that, for controlling environmental conditions in a periphery of the products, supplies first conditioning air adjusted to a first condition;

a second connection port that is connected to a second out-of-shelf supply duct that supplies second conditioning air adjusted to a second condition that differs to the first condition;

an opening adjusting means that adjusts an opening of the first connection port to the first out-of-shelf supply duct and an opening of the second connection port to the second out-of-shelf supply duct, respectively; and

a shelf supply duct for blowing out at least one of the first conditioning air supplied from the first connection port and the second conditioning air supplied from the second connection port from air outlets disposed at least one of above and below the shelf.

15. A shelf according to Claim 14,

wherein the shelf supply duct mixes and blows out the first conditioning air supplied from the first connection port and the second conditioning air supplied from the second connection port.

16. A shelf according to Claim 15,

wherein the first connection port and the second connection port are disposed so as to not coincide in a left-right direction of the shelf, and

the shelf supply duct includes a mixing part that extends in the left-right direction of the shelf so as to connect the first connection port and the second connection port, and a supply part that extends from the mixing part in a front-rear direction of the shelf, the supply part being connected to the air outlets and a cross-sectional area of the supply part being smaller than that of the mixing part.

17. A shelf according to Claim 16,

wherein the first connection port, the second connection port, and the mixing part are disposed on a base end side of the shelf, and

the base end side is a side where the shelf is attached to at least one of the first out-of-shelf supply duct, the second out-of-shelf supply duct, and a housing that forms a storage space in which the shelf is disposed.

18. A shelf according to Claim 14, further comprising:

a shelf discharge duct; and

a third connection port that connects the shelf discharge duct to an out-of-shelf discharge duct.

19. A shelf according to Claim 18,

wherein the shelf discharge duct is disposed on a base end side of the shelf, and

the base end side is a side where the shelf is attached to at least one of the first out-of-shelf supply duct, the second out-of-shelf supply duct, and a housing that forms a storage space in which the shelf is disposed.